

May 19, 2011

Attention: Wind Energy Guidelines
Division of Fisheries and Habitat Conservation
U.S. Fish and Wildlife Service
4401 North Fairfax Drive Mail Stop 4107
Arlington, VA 22203-1610

Re: Comments of the American Wind Energy Association on the Draft Land-Based Wind Guidelines

Submitted via email to windenergy@fws.gov

I served as a member of the Wind Turbine Siting Guideline Federal Advisory Committee ("FAC"). My service on the FAC remains special to me, not only for the friendships made, but also for the pride I feel in the final Preamble to the Committee Recommendations, Committee Policy Recommendations, and Committee Recommended Guidelines (collectively referred to as the "Recommendations") delivered by the committee to the Secretary on March 4, 1020. I appreciate the opportunity to provide these comments on the *Draft Land-Based Wind Guidelines* ("Guidelines") for which a notice of availability was published in the Federal Register on February 18, 2011 by the United States Fish & Wildlife Service ("USFWS").

At the start of the FAC process, Dave Stout, the USFWS Designated Federal Officer to the FAC, undertook an exercise to focus the FAC on the process before us. For days we worked on ground rules. At the time I believed this to be a waste of time. Looking back I understand Dave's exercise had two objectives: the first was to establish ground rules, items of greater significance than I would have guessed; but the second was to force the FAC members to engage each other on items with less potential to be divisive before we actually began the task at hand. This exercise proved invaluable. Members took the task seriously. Preconceptions as to allegiance (NGO to NGO, industry to industry, agency to agency) went by the wayside. Frustration and obstinacy gave way during discussion. Before anyone realized it, bonds had been forged and the first hints of trust were established. Dave guided the FAC members forward to build the foundation for the serious negotiation and delicate compromise that was to follow and the pattern established during the ground rules exercise repeated itself during the creation of the recommendations. Strongly held beliefs frequently led to disagreement. Disagreement was followed by discussion and discussion ultimately led to compromise. No issue, no matter how divisive initially remained beyond agreement and in the end this process allowed all twenty-two FAC members to agree on a single set of recommendations. This would have been impossible without the guidance and leadership of Dave Stout.

During this creation and deliberation process many compromises were made. The give and take of these compromises was contained within the Recommendations. The specifics of those compromises are often subtle and may not be obvious to one reviewing the Recommendations.

Changes to wording in the recommendations, even slight changes, can weaken or even undo the terms of the compromise and these compromises were the glue that held the recommendations together. I feel confident in saying that without that glue final agreement for all 22 members would have been impossible and a consensus document would not have been provided to the Secretary. In other words, the FAC would have failed its charter. The USFWS would have been left with the 2003 wind guidance, a policy document that proved unhelpful for NGOs and agencies and unworkable for the wind industry. It was the failure of the 2003 guidance that provided the genesis for the FAC.

An open FAC meeting was held at USFWS headquarters on April 27, 2011 to discuss the Guidelines *vis a vis* the Recommendations. USFWS personnel charged with responsibility for the Guidelines made it clear it was the intent of the USFWS to follow the recommendations. In order to carry out this task with the intention of following the Recommendations USFWS personnel made changes designed to simplify and clarify language contained in the Recommendations. It appeared USFWS were genuinely surprised, frustrated and disappointed to hear from FAC members that the Guidelines varied greatly from the Recommendations in spirit and content, failed to capture the terms of the many compromises, and ultimately yielded a document as unhelpful and unworkable as the 2003 guidance.

In the end, USFWS personnel requested detailed comments from FAC members as to how they might modify the Guidelines to more accurately capture and reflect the Recommendations. The FAC has agreed to do so. Any attempt to rework the Guidelines, even with specific FAC member assistance, will, unfortunately, likely prove as complex and difficult as the initial USFWS effort to capture the Recommendations in the Guidelines. Success will likely prove to be just as elusive on a second attempt. Accordingly, I respectfully request the USFWS present the Recommendations to the Secretary as the USFWS recommended Guidelines. Please allow me to explain my rationale.

The Recommendations follow the FAC charter to develop voluntary wind turbine siting guidelines and present a non-prescriptive, flexible, tiered approach to siting impact analysis. The tiered approach is as easily applied to coastal Maine as it is to the Sonoran Desert. The tiered approach allows application of federal, state, local and tribal regulation, consideration of local species and habitat needs and constraints, migratory needs, and requires application of the mitigation hierarchy to every significant adverse impact. The tiered approach does so with little additional strain on USFWS' already stretched resources and ensures responsible wind energy development.

The recommendations have received the endorsement of leading environmental NGOs, state wildlife agencies, the Blackfeet Nation and, wind industry representatives and were vetted to affiliates and like situated entities within each of those separate groups. During the formulation of the Recommendations, the USFWS was allowed time to consult with other federal agencies. The signatures received reflect agreement with the Recommendations. Many American Wind Energy Association ("AWEA") companies acknowledged in a letter to the Secretary of Interior an intention to comply with the regulations. In short, the Recommendations are a policy document that has achieved "buy-in." Buy-in will lead to application of the Recommendations

to the wind energy development process. Application of the Recommendations to the wind energy development process will yield environmentally responsible wind energy development.

The wind energy development industry is committed to environmentally responsible wind energy development and, regardless of whether the Guidelines as currently contemplated issue in their present form, the industry will continue to develop in an environmentally responsible manner. That said, and should guidelines ultimately issue that do not accurately and fully capture the Recommendations, there is a much lower likelihood of buy-in. If history provides a roadmap to the future, it is likely the guidelines will have an impact similar to that seen following the 2003 guidance. Many of the positives that would have been flowed from implementation of the Recommendations could be diminished.

INDIVIDUAL CASES

In keeping with my request that the Recommendations be accepted in the place of the Guidelines and issued as the official Interior/USFWS guidance on wind turbine siting and, because of my belief that any wordsmithing of the Guidelines would still fall far short of the Recommendations and therefore fail and, because many of the specific perceived shortcomings of the Guidelines were reviewed during the April 27, 2011 FAC meeting, I will revisit only a few of them here and only in brief fashion:

1. No phased-in application; no attempt to address operating projects/projects already involved in the development process;
2. Mandatory or fixed Pre- and post- construction analysis periods that are at odds with the basic principles of the iterative aspect of the tiered approach;
3. Increased scope of pre- and post-construction analysis;
4. Expansion of covered impacts from “significant adverse impacts” to “adverse impacts;”
5. Expansion of consideration from “species of concern” to all species regardless of the level of threat, risk or impact, whether localized or on a population level;
6. Lack of connection of numerous Guidelines requirements to documented data or scientifically credible information;
7. Presentation of operational modifications as standard or readily applicable, not limited to occasions of extraordinary circumstance;
8. Overbroad/confusing application of “compensatory mitigation;
9. Undermining/elimination of enforcement discretion protections; and
10. There is no provision for updates/modifications.

THE EAGLE ACT

Inclusion of the Bald and Golden Eagle Protection Act (“BGEPA”) into the body of the Guidelines was the USFWS action least in keeping with the iterative aspect of the tiered approach. Inclusion converts every wind energy project analyzed in adherence with the Guidelines, regardless of federal nexus, into a NEPA project. The iterative aspect of the tiered approach would involve BGEPA only as warranted by the environmental analysis.

The whole of the tiered approach was to base responsive actions on data and analysis from the iterative tiered process. Dramatic impacts warrant equally dramatic responses, i.e., evidence indicating a potential wind energy site will have untoward impacts could/should warrant abandonment of that site. Documented underlying data on golden eagle take, both from a generalized anthropogenic analysis and from a wind impact analysis indicates wind energy generation is responsible for a small percentage of anthropogenic mortality. Only two cases of bald eagle take from wind energy generation have been documented. USFWS personnel have indicated the BGEPA guidance numbers are based on golden eagle take by wind energy generation at the Altamont Pass Wind Resource Area ("APWRA"). The APWRA was installed over thirty years ago in a high use bird area with a bountiful prey base for raptors, used primitive equipment, and scant environmental analysis preceded siting and/or construction. Approximately 6,700 turbines generated yielded 630 nameplate megawatts of electricity generation. In short, especially when compared to modern siting practices and wind generating equipment (post 2000) the APWRA is a distinct anomaly. Much has been learned from the mistakes made at the APWRA and advancements in siting practice and generating equipment have resulted. These advances have informed wind energy development around the world and will yield dividends at the APWRA as repowering and re-siting occurs between now and the settlement deadline of 2015. With today's larger, more efficient machines ranging in size from 1.5 to 3 megawatts each, APWRA's output could be reached using 210 to 420 turbines instead of 6,700. Avoidance of the heaviest areas of ground squirrel populations will combine with fewer machines and dramatically reduce the golden eagle take at the APWRA (historically estimated at between 24 and 116 golden eagles per year). Use of the historic APWRA golden eagle fatality data as an indicator of future, non APWRA located wind energy generation lacks a sound scientific basis and is contrary to known wind energy generation golden eagle impact data.

Analysis of raptor take from wind energy generation across the western US, excluding the APWRA, sits consistently at one raptor per turbine per year. This number is likely to decrease below one raptor per turbine per year due to the increase in generation output (fewer turbines required to generate the same or greater amount of electricity), increased spacing between turbines to accommodate increased wake effects, avoidance of areas of high raptor/golden eagle use (corridors, high prey base areas, and the like).

Finally, the bulk of present raptor take involves red-tailed hawks. Golden eagle take outside the APWRA continues to be a rare event. According to a recent review of all known anthropogenic mortality data sources and, excluding the anomalous impacts from the APWRA, modern wind energy generation is responsible for less than one percent (<1%) of all documented golden eagle fatalities (Tetra-Tech, December 2010 to January, 2011 review of USGS Bird Banding Laboratory (Band Returns), American Bird Conservancy/USFWS Avian Incident Monitoring System (AIMS), FAA Wildlife Strike Database, USGS National Wildlife Health Center, USFWS National Forensics Laboratory, and USFWS Law Enforcement Database). According to this review, 3,715 golden eagle fatalities were reported between 1960 and December, 2010. Of this number 2,424 were labeled "human-caused" and were broken out as follows: 50% from electrocution; 13% from poisoning; 5% from vehicle strikes; 5% from shooting; <1% from wind energy generation.

The present BGEPA guidance has already had a dramatic negative impact on wind energy development. It is estimated that \$2 Billion worth of ARRA money slated for wind energy development was left in the treasury due to financial uncertainty stemming from the BGEPA permitting requirements (the NEPA aspect, 5 year duration limitation with the necessity for NEPA reapplication, and USFWS' promise that no take permits would issue due to USFWS belief golden eagle populations were decreasing. Evidence to the contrary has been presented to USFWS by AWEA, *et alia*, on prior occasions and in response to present comment periods for the Guidelines and BGEPA). It is the conventional wisdom in the wind energy industry that, unless the BGEPA guidance is modified to reflect wind's small percentage of golden eagle take and *de minimus* bald eagle take, and positive impacts from a global climate change aspect, BGEPA alone will slow US wind energy development to a virtual standstill.

Accordingly, the Guidelines and BGEPA guidance should be decoupled and the BGEPA guidance should be completely revamped with regard to wind energy generation.

CONCLUSION

The FAC was brought together to allow diverse interests to create guidelines that would address impacts from wind energy development. The difficulty lay in balancing the needs of wildlife and the practical realities of business. The FAC walked this fine edge and crafted recommendations that met these sometimes competing interests. Members of the diverse communities agreed to a single series of recommendations filled with subtlety and nuance held together in a delicate balance. The end result is a flexible tool capable of application in the broadest range of environmental circumstance. This tool should remain intact and the Recommendations should be passed along to the Secretary of the Interior for his approval.

Thank you for your consideration.

Respectfully yours,

Rich Rayhill
FAC Member
Co-Founder Ridgeline Energy